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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,550	07/20/2001	Pradeep Shrikrishna Limaye	716-445us	1950
22897	7590	02/08/2005	EXAMINER	
DEMONT & BREYER, LLC SUITE 250 100 COMMONS WAY HOLMDEL, NJ 07733			LEE, ANDREW CHUNG CHEUNG	
			ART UNIT	PAPER NUMBER
			2664	

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/909,550	LIMAYE ET AL.
	Examiner	Art Unit
	Andrew C Lee	2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 20 July 2001.  
 2a) This action is **FINAL**.                                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-15 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-15 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 07/20/2001.

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

Fig.2 (2/4) the element "Table Mapping OC-1's in OC-N";

Fig. 3 (3/4), the elements "OC-1" at task 301, "OC-1" at task 302 , "OC-1s and OC-N" at task 303, "OC-N" at task 304 and "OC-N" at task 305; .

Fig. 4 (4/4), the elements "OC-N" at task 401, "OC-1s and OC-N" at task 402, "OC-N" at task 403, "OC-1" at task 404, "OC-1" at task 405.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Regarding to Fig. 2, Fig. 3, Fig. 4, page 3, line 11, the element "a node of 110-i", line 13, the element "a node of 110-i"; page 7, line 18, the element "a STS-N", line 28, the element "to add the tributaries into one or more STS-N's", line 29, the element "to drop the tributaries from one or more STS-N's", lines 31 – 32, the elements "STS-N and STS-1's". pages 8 - 13, the elements "STS-1, STS-N, STS-48", Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings (Fig. 2, node 110- i) are objected to under 37 CFR 1.83(a) because they fail to show " the K<sub>1</sub> and K<sub>2</sub> bytes of the automatic protection channels" as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of

the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings (Fig. 1 and Fig. 2) are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "(1) a first automatic protection switching channel that is associated with said first SONET/SDH ring, and (2) a second automatic protection switching channel that is associated with said second SONET/SDH ring" as disclosed in claims 3 and 6; "(1) the K<sub>1</sub> and K<sub>2</sub> line overhead bytes that are associated with said first SONET/SDH ring, and "(1) the K<sub>1</sub> and K<sub>2</sub> line

overhead bytes that are associated with said second SONET/SDH ring." As disclosed in claims 4 and 7 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

5. The disclosure is objected to because of the following informalities:

- The Office would request the Applicants to clarify the use of OC-1 and OC-N in Fig. 2, Fig. 3, Fig.4, respectively. While the reference

elements "STS-1 and STS-N" are described and mentioned in the specification. However, there is not a word mentioned bout OC-1 or OC-N. There are slightly different in applying the element "STS-1" and "OC-1".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1 – 15 are rejected under 35 U.S.C. 102(e) as being anticipated over Chi et al. (U.S. Patent No. 6654341 B1)

Regarding claim 1, Chi et al. discloses the limitation of a telecommunications network (Fig. 6) comprising: a first SONET/SDH ring that comprises a first plurality of nodes (column 2, lines 53 – 55), wherein said first SONET/SDH ring defines a first address space and wherein each of said first plurality of nodes is identified by a unique address in said first address space

(column 4, lines 35 – 41; line 54; lines 57 – 59); and a second SONET/SDH ring that comprises a second plurality of nodes (column 2, lines 55 – 56), wherein second SONET/SDH ring defines a second address space and wherein each of said second plurality of nodes is identified by a unique address in said second address space (column 4, lines 35 – 41; lines 54 – 55); wherein there are at least two nodes that have an address in the address space of said first SONET/SDH ring and an address in the address space of said second SONET/SDH ring (column 2, lines 59 – 62).

Regarding claim 2, Chi et al. discloses the limitation of the telecommunications network of claim 1 further comprising an optical fiber that carries a first STS-N that comprises: (1) a second STS-1 that is associated with said first SONET/SDH ring (column 5, lines 37 – 38), and (2) a third STS-1 that is associated with said second SONET/SDH ring (column 5, lines 38 – 39).

Regarding claim 3, Chi et al. discloses the limitation of the telecommunications network of claim 1 further comprising an optical fiber that carries a first STS-N that comprises: (1) a first automatic protection switching channel that is associated with said first SONET/SDH ring (column 4, lines 57 – 59), and (2) a second automatic protection switching channel that is associated with said second SONET/SDH ring (column 4, lines 60 – 64).

Regarding claim 4, Chi et al. discloses the limitation of the

telecommunications network of claim 1 further comprising an optical fiber that carries a first STS-N (column 2, lines 5 – 9) that comprises: (1) the K<sub>1</sub> and K<sub>2</sub> line overhead bytes that are associated with said first SONET/SDH ring (column 2, lines 10 – 14; column 5, lines 18 – 21; lines 37 – 38), and (2) the K<sub>1</sub> and K<sub>2</sub> line overhead bytes that are associated with said second SONET/SDH ring (column 2, lines 10 – 14; column 5, lines 18 – 21; lines 38 – 39).

Regarding claim 5, Chi et al. discloses the limitation of a telecommunications network comprising: a first SONET/SDH ring (column 2, line 53 - 54); and a second SONET/SDH ring (column 2, lines 55 – 56); an optical fiber that carries: (1) a first STS-1 that is associated with said first SONET/SDH ring (column 5, lines 23 – 25), and (2) a second STS-1 that is associated with said second SONET/SDH ring (column 5, lines 25 – 27; lines 29 – 30).

Regarding claim 6, Chi et al. discloses the limitation of a telecommunications network comprising: a first SONET/SDH ring (column 2, line 53 - 54); and a second SONET/SDH ring (column 2, lines 55 – 56); an optical fiber that carries: (1) a first automatic protection switching channel that is associated with said first SONET/SDH ring (column 4, lines 57 – 59), and (2) a second automatic protection switching channel that is associated with said second SONET/SDH ring (column 4, lines 54 – 55, Fig. 6, element p4).

Regarding claim 7, Chi et al. discloses the limitation of a telecommunications network comprising: a first SONET/SDH ring (column 2, line 53 - 54); and a second SONET/SDH ring (column 2, lines 55 – 56); an optical fiber that carries: (1) the K<sub>1</sub> and K<sub>2</sub> line overhead bytes that are associated with said first SONET/SDH ring (column 2, lines 10 – 14; column 5, lines 18 – 21; lines 37 – 38), and (2) the K<sub>1</sub> and K<sub>2</sub> line overhead bytes that are associated with said second SONET/SDH ring (column 2, lines 10 – 14; column 5, lines 18 – 21; lines 38 – 45).

Regarding claim 8, Chi et al. discloses the limitation of a system comprising: a first optical fiber that is associated with a first SONET/SDH ring (Fig. 6, element “ring 600”, element “W1”); a second optical fiber that is associated with a second SONET/SDH ring (Fig. 6, element “ring 610”, element “W5”); a third optical fiber (Fig. 6, element “ring 600”, element “W4”); a fourth optical fiber that is associated with said first SONET/SDH ring (Fig. 6, element “ring 600”, element “W2”); a fifth optical fiber that is associated with said second SONET/SDH ring (Fig. 6, element “ring 610”, element “W6” ); a first SONET/SDH node for receiving a first STS-N from said first optical fiber ( Fig. 6, element “603”, element “W1”), for receiving a second STS-N from said second optical fiber (Fig. 6, element “ring 610”, element “603”, element “W5”), and for transmitting said first STS-N and said second STS-N via said third optical fiber (Fig. 6, element “602” and element “W4”); and a second SONET/SDH node for

receiving said first STS-N and said second STS-N from said third optical fiber, for transmitting said first STS-N via said fourth optical fiber, and for transmitting said second STS-N via said fifth optical fiber (Fig. 6, element " 601", element "W6") .

Regarding claim 9, Chi et al. discloses the limitation of the system of claim 8 wherein said third optical fiber carries automatic protection switching signaling for both said first SONET/SDH ring and said second SONET/SDH ring (Fig. 6, element " 605", P4).

Regarding claims 10, 11, Chi et al. discloses the limitation of a SONET/SDH node comprising: a first input port for receiving a first automatic protection switching channel from a first optical fiber that is associated with a first SONET/SDH ring (Fig. 6, elements "600" and "P1"); a second input port for receiving a second automatic protection switching channel from a second optical fiber that is associated with a second SONET/SDH ring (Fig. 6, element "610", element "solid arrowed line between nodes "612" and "603"); a multiplexor for multiplexing said first automatic protection switching channel and said second automatic protection switching channel into one STS-N frame (column 2, lines 20 – 21; Fig.6, elements "604" , "P3", "P4" ); and a output port for transmitting said STS-N frame via a third optical fiber (Fig. 6, the protection line (dotted line) between switches "604" and "612" ).

Regarding claims 12, 14, Chi et al. discloses the limitation of a method of

operating a time-division multiplexed telecommunications system (column 4, lines 11 – 13), said method comprising: receiving a first optical carrier signal that comprises a first source address and a first destination address in a first address space (column 4, element 414, lines 29 – 41); receiving a second optical carrier signal that comprises a first source address and a first destination address in a second address space (column 4, element 416, lines 29 – 41); multiplexing said first optical carrier signal and said second optical carrier signal into a frame (column 2, lines 20 – 26); and transmitting said frame (column 2, lines 24 – 26); wherein said first optical carrier signal in said frame comprises a second source address and a second destination address in said first address space (column 4, element 414, lines 38 – 40; lines 42 – 45); and wherein said second optical carrier signal in said frame comprises a second source address and a second destination address in said second address space (column 4, element 416, lines 40 – 41).

Regarding claims 13, 15, Chi et al. discloses the limitation of the method of claim further comprising: receiving said frame (column 4, lines 20 – 22); demultiplexing said first optical carrier signal and said second optical carrier signal from said frame (column 4, lines 32 – 33); transmitting said first optical carrier signal, wherein said first optical carrier signal as transmitted comprises a third source address and a third destination address in said first address space (column 4, lines 35 – 38; column 6, lines 10 – 14); and transmitting said second optical carrier signal, wherein said second optical carrier signal as transmitted

comprises a fourth source address and a fourth destination address in said second address space (column 4, lines 35 – 38; column 6, lines 14 – 23).

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ajit Patel  
Primary Examiner